

Claims

1. A process for the treatment of the glass sheets of an asymmetric pair of glass sheets for the production of a laminated window, whereby the glass sheets are preheated, then undergo a press-bending process and are finally cooled, characterised in that the preheating and/or the press-bending process are controlled in such a way that the two glass sheets are at substantially the same temperature after completion of the press-bending process.
2. The process according to claim 1, characterised in that the temperature of the glass sheets is detected as a control parameter after completion of the press-bending process.
- 15 3. The process according to claim 1 or 2, characterised in that the temperature of the glass sheets is detected as a control parameter before the start of the press-bending process.
4. The process according to any one of claims 1 to 3, characterised in that the glass sheet heating more rapidly is subjected to the press-bending process for a longer period than the glass sheet heating more slowly.
- 20 5. The process according to any one of claims 1 to 4, characterised in that the glass sheet heating more rapidly is subjected to intermediate cooling during or immediately after the preheating.
- 25 6. The process according to claim 5, characterising in that the intermediate cooling is carried out by blowing air at ambient temperature at both sides of the glass sheet.
7. The process according to claim 6, characterising in that the air is blown with a blowing pressure of < 200 mbar.
- 30 8. A plant for the treatment of the glass sheets (2) of an asymmetric pair of glass sheets for the production of laminated glass, with a preheating furnace (1), followed by a

press-bending station (4), and with a lehr (9) downstream of the press-bending station (4),

characterised by

a control device (16) for controlling the preheating furnace (1) and/or the press-bending station (4) and by at least a first temperature measuring point (11) for the glass sheets (2), arranged between the press-bending station (4) and the lehr (9), the signal from which temperature measuring point is fed to the control device (16) and used directly or indirectly for controlling the preheating furnace (1) and/or the press-bending station (4).

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9. The plant according to claim 8, characterised in that there is provided before the press-bending station (4) a further temperature measuring point (14), the signal from which is fed to the control device (16) and used as an indirect measure of the temperature of the glass sheets (2) at the exit of the press-bending station (4) for controlling the preheating furnace (1) and/or the press-bending station (4).

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10. The plant according to claim 8 or 9, characterised by an intermediate cooling installation (12, 13) arranged in the preheating furnace (1), whereby the control device (16) causes the intermediate cooling installation (12, 13) to act solely on the glass sheet (2) heating more rapidly.

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11. The plant according to claim 10, characterised in that the intermediate cooling installation is designed as a stationary air-cooling installation and has at least one pair of jet tubes (12, 13), which are aligned at right angles to the transport direction of the glass sheets (2) and, lying opposite one another, act on the upper and lower side of the glass sheet heating more rapidly.

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12. The plant according to claim 11, characterised in that the jet tubes (12, 13) have a diameter of approx. 40 mm to 60 mm.

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13. The plant according to any one of claims 8 to 12, characterised in that the preheating furnace (1) is designed as a roller-hearth furnace, whereby the spacing between its transport rollers (3) diminishes towards the exit, and that the pair of jet tubes (12, 13), or in the case of several pairs of jet tubes (12, 13) the pair lying nearest to the exit, is

arranged where the lower jet tube (12) just still fits between two neighbouring transport rollers (3).

14. The plant according to any one of claims 8 to 13, characterised in that it includes a
5 timing control element (15), with which the dwell time of the glass sheets (2) in the press-bending station (4) is set according to the temperature of the glass sheets (2) at the exit of the press-bending station (4) determined with the aid of the temperature measuring point(s) (11, 14).